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ABSTRACT

The Public Service Occupations Curriculum Project was designed to serve as a master curriculum resource for school districts in the implementation of a career education program in public service occupations. The project produced comprehensive curriculum materials for grades 7-12 and adult education which can be adapted by local school districts to suit their particular needs. The report summarizes the activities of the project and evaluative data gained from field testing the curriculum in vocational and general modes of education. Much of the document reproduces and discusses the results of field-test questionnaires used for students, teachers, and administrators. Test sites in California and New York are described in some detail. The major results of the program were: administrators, teachers, and students generally agreed that the project materials had content validity; teachers felt that the curriculum guides were easy to adapt to their teaching styles and could be used in varying instructional situations; and the program is administratively feasible. (Author/PR)

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# Public Service Occupations Curriculum Project

## Final Report

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By:

Constance F. Gipson
and
James J. Lynn, M.S.

in cooperation with:

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Program Planning Unit
Sacramento, California 95814

and:

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## FOREWORD

This report is the final document in a series developed to inform and assist those who are involved in implementing career education programs concerned with public service occupations. The report summarizes the activities of the project and evaluative data gained from field testing the curriculum in vocational and general modes of education. It, with the three previous process reports, fulfills contractual agreements for periodic and final technical reports of this grant. Many individuals and organizations have made substantive contributions in the evaluation of the project materials. The project staff is indebted to these individuals and groups who so generously gave their time and efforts in gathering the evaluative data necessary for this report. To all involved, we express our deepest gratitude.

To Dr. Patrick J. Weagraff, goes a special acknowledgement as the initial project director of the Public Service Occupations Curriculum Project. Most of the credit for the conceptualization, development, and coordination of the PSOCP belongs to him.

This final report was coordinated under the direction of Mrs. Constance F. Gipson, Curriculum Specialist, Public Service Occupations Curriculum Project, Vocational Education Section of the California State Department of Education.

James J. Lynn
Project Director

## ACKNOWLEDGEMENTS


Mr. Charles D. Ahern
Superintendent of Schools
Oswego City School District
Oswego, New York

Mr. Victor A. Backstrom, Instructor
Jordan High School
Long Beach, California

Mr. Alvin Beller, Director
Regional Training Center
U.S. Civil Service Commission
San Francisco, California

Mr. Harold M. Blue
Special Consultant
Sacramento, California

Mr. Jack Bosna
Long Beach Unified School District
Long Beach, California

Dr. William Burns
Professor of Education
State University of New York
College at Buffalo
Buffalo, New York

Mr. Donald Casciano
Social Studies Teacher
Canisius High School
Buffalo, New York

Mrs. Mary DeNure
Public Service Occupations Consultant
California Community Colleges
Sacramento, California

Dr. Ronald Detrick
Director, Career Education
San Diego City Schools
San Diego, California

Dr. Clark Dobson, Associate Secretary
Association for Supervision and
Curriculum Development/NEA
Washington, D.C.

Mrs. Miriam Dong, Project Secretary
California State Department of Education
Sacramento, California

Ms. Rita Eichenger
Assistant Principal
Williamsville, New York

Dr. James Finch, Superintendent
Sweet Home Central Schools
Amherst, New York

Dr. Nevin Frantz
Associate Professor of Education
University of Georgia
Athens, Georgia

Mr. Irvin Gartner, Associate Director
Berkeley Executive Seminar Center
Berkeley, California

Mr. Elmer George
Executive Director
Georgia Municipal Association
Atlanta, Georgia

Mr. Joseph Griffo, Chairman
Social Studies Department
Sweet Home Junior High School
Amherst, New York

Mr. John Hastings
Team Leader - Social Studies
Oswego Middle School
Oswego, New York

Dr. A. Bernard Hatch
Superintendent of Schools
Williamsville Central Schools
Williamsville, New York

Dr. Harry Huffman, Director
Business and Office Career Cluster
Colorado State University
Ft. Collins, Colorado

Dr. David Jesser, Director
Career Education Project
Council of Chief State School Officers
Washington, D.C.

Lt. Charles Kane
San Leandro Police Department
San Leandro, California

Mr. Edward King
Assistant Principal
American High School
Fremont, California

Mr. Eugene Kobylinski
Administrative Coordinator
Sweet Home Junior High School
Amherst, New York

Mr. Alfred Koch, Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Mr. Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Mrs. Edwina Leon
Special Consultant
Sacramento, California

Dr. Nellie Love
K-12 Curriculum/Instruction Coordinator
Sweet Home Schools
Amherst, New York

Mr. Fred Martinez, Specialist
Vocational Education Section
California State Department of Education
Sacramento, California

Mr. Edward Matott
Team Leader - Science
Oswego Middle School
Oswego, New York

Mr. James Mayo, Director
Career Education
Fremont-Newark-ROP
Fremont, California

Mr. Fred Miller, Chief
Public Services Institute
Pennsylvania State Department of Education
Harrisburg, Pennsylvania

Father Vincent Mooney, President
Canisius High School
Buffalo, New York

Mr. Arden Nelson
Manpower Administration
U.S. Department of Labor
Washington, D.C.

Mr. Carl Palmitesso, Principal
Oswego Middle School
Oswego, New York

Mrs. Nadine Reid, Public Service
Occupations Curriculum Coordinator
San Diego Unified School District
San Diego, California

Father James J. Reilly, S.J.
Guidance Counselor
Canisius High School
Buffalo, New York

Mr. Thomas Schrodi
Coordinator of Career Education
Orange Unified School District
Orange, California

Mr. Paul E. Sugg
Assistant Principal
Williamsville South High School
Williamsville, New York

Dr. William Thomas, Dean
Experimental Education Programs
University of California
Los Angeles, California

Mr. Sam Wasserman, Teacher
American High School
Fremont, California

United States Office of Education Representatives

Dr. William Berndt, Project Officer
Curriculum Center for Occupational
and Adult Education

Mr. John Bunten
Senior Program Officer, Region IX
Bureau of Adult and Vocational-
Technical Education

Ms. Mary V. Marks, Chief
Curriculum Development Branch
Bureau of Occupational Education

Dr. Elizabeth Simpson, Director
Curriculum Center for Occupational
and Adult Education

Mr. Gil Stephens, Program Officer
Bureau of Adult and Vocational-
Technical Education, Region IX

Dr. James Wykle, Project Monitor
Senior Education Program Specialist
Bureau of Adult, Vocational and
Technical Education

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SECTION 1

# A SUMMARY OF THE FIELD TEST RESULTS

The U.S. Office of Education, as a part of their thrust for educational reform, has identified fifteen occupational clusters for major curriculum developmental work. In cooperation with state and local administrators, teachers, curriculum specialists and counselors, attempts are being made to develop students' awareness of possible career fields and specific jobs through increased implementation of occupational education into the school curriculum.

The fundamental concept of this effort is that educational experiences should be geared to preparation for economic independence and an appreciation for the dignity of work. Preparing students for a successful life of work by increasing their options for occupational choice, eliminating barriers to attaining job skills and increasing learning achievement in all subjects and at all educational levels is central to this thrust.

One of the fifteen "occupational clusters" or "career fields" is the Public Service Occupations. This cluster now includes or "employs" approximately one out of every six workers in the United States.

The California State Department of Education, Vocational Education Section, under a grant from the U.S. Office of Education, Curriculum Center for Occupational and Adult Education, endeavored to develop nationally applicable secondary school curriculum guidelines for the public service occupations career field. This document reports the final results of that project.

## Content Validity

From the data gathered from field testing in vocational and general modes of education, the general consensus of opinion from administrators, teachers, and students was that the Public Service Curriculum Project materials had content validity. The educators involved in field testing the curriculum agreed that the materials were comprehensive not only in the fact that it covers the major areas of information and job requirements in public service, but it is also comprehensive enough to be nationally applicable.

## Product Usability

Teachers from all of the test sites generally felt that the curriculum guides were easy to adapt to their teaching styles and could be used in varying instructional situations. Success was reported in separate vocational courses, mini courses, and courses where the material was infused into the ongoing curriculum. The format of the curriculum guides was generally felt to be flexible enough to be modified to suit the needs of the class being taught. It is interesting to note that in the questionnaire no two educators put identical emphasis on the same areas. Teachers who had a large percentage of students who could be classified as disadvantaged were able to modify the curriculum to meet their special needs. Teachers at several sites individualized

the curriculum or permitted students to work on individual projects with successful results.

The curriculum materials seemed to work well when related to other career education projects and other related situations, such as work experience. The Common Core curriculum guide received almost universal acceptance by work experience coordinators who were indirectly or directly involved in the project.

With few exceptions, the teachers involved in the project found a wealth of materials related to public service with little or no difficulty.

Most of the teachers found the pre- post tests easy to administer and helpful "in assessing" student learning gain.

The data was contradictory in the area of inservice training. While some teachers felt the curriculum could be taught with no inservice training, others felt some inservice training was necessary. For this reason, the project staff developed the Implementation Guide to meet this need.

Administrative Feasibility

The cost factor for implementing the public service program was felt to be below average by most educators since no purchase of additional equipment is necessary. The only requirements seem to be in ordinary classroom facility with standard audio-visual equipment.

Personnel selection did not appear to be a problem. Most sites were able to find teachers who were career-oriented and enthusiastic about the program, and energetic enough to find additional resource materials, speakers, and field trip locations.

Student Learning Gain

Students exposed to the curriculum showed favorable gains in test results. In San Diego, pre- post tests on the Government Agency Management unit were taken by 57 students, 16 of whom were classified as disadvantaged. Thirty-one students, including ten who were disadvantaged, were tested on Social and Economic Services. A test of statistical significance was performed on test scores to determine student learning gains.

Students who have been previously identified as "educationally disadvantaged," had lower pre-tests scores than nondisadvantaged students on both curriculum units. On the Government Agency Management unit, however, mean post test scores for disadvantaged students were nearly the same, respectfully 36.2 and 37.1. Differences between pre- and post test scores for disadvantaged students were significant at the .05 level. Gains in mean test scores for nondisadvantaged students were significant at the .01 level.

On the Social and Economic Services curriculum unit, differences in pre 1 post mean test scores for disadvantaged were nonsignificant. By contrast, differences in mean test scores for nondisadvantaged students on this unit were highly significant (.001 level of significance).

In general, the students who participated in the field testing were enthusiastic and felt it was a worthwhile learning experience. Student demand for the public service mini courses in New York was much greater than anticipated or expected by the test site coordinators. Interest in taking the class in the vocational mode has continued to go up.

Related Results

The impact of the public service curriculum was significant both in the general and vocational education modes. There was an increased awareness on the part of many educators of the need and value of vocational education. There was a greater cooperation between vocational and academic education since this curriculum tends to blur this distinction. The general education test sites had no problems in scheduling and recruitment. However, these teachers began to see the need for advisory committees, which are an integral part of vocational education today. The academic teachers were particularly eager to use a program that increased the relevance of their particular subjects.

Among the unexpected "spin-offs" of the program was not only the extent to which the curriculum influenced other classes, but the interest of other schools not involved in the testing to participate in the program. The curriculum spread from school to school, and from high school both up to community college and down to elementary school.

The interaction of school personnel, parents, and the community was at a high level during the testing of this program. Both the schools and the communities felt they benefited as a result.

The public service guides acted as a catalyst in some areas to initiate overall curriculum development in career education. The guides were used as a model by some local educational agencies to initiate career education concepts into their schools and as a format for other career cluster curriculum planning.

SECTION 2

# THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT

## Goals and Purposes of the Project

The Public Service Occupations Curriculum Project was designed to serve as a master curriculum resource for school districts in the implementation of a career education program in public service occupations. The project resulted in comprehensive curriculum materials in public service occupations for grades 7-12 and adult education which can be adapted by local school districts to suit their particular needs. The final products of the project were field tested and modified to produce a valid curriculum for local educational agency use.

## Provision for Multiple Inputs

In order to have national relevance, it was determined that multiple sources of input must be made at every stage of the project. The project utilized several major sources in the development of its materials, including:

*The National Advisory Committee. Formed in the Fall of 1971, the Committee was selected from representatives of local, state, and federal government, as well as secondary and post-secondary education. The Committee met for the first time in January, 1972, at the U.S. Office of Education, Washington, D.C., where they established the broad concepts and general guidelines for project implementation.

* Appendix A lists the members of the PSOCP National Advisory and Review Committee.

The second meeting of the Committee was held in San Diego, California, October 31 and November 1, 1972. The proceedings were concerned with the progress of the project, the design of the proposed curriculum guides, and the plans for field testing the curriculum.

The Committee met again on February 11 and 12, 1974, to review the previous year's work. The agenda focused on problems and experiences identified through pilot testing. Methods of articulation, packaging, and dissemination of the materials were also deliberated.

Ad Hoc Advisory Groups

It is notable that over 800 persons from twenty-one states were involved in the conceptualization, development and evaluation of the public service occupations curriculum materials.

Over 400 persons were involved in the basic analysis of the public service occupations, which resulted in the identification of 8 major occupational groups, and 39 major job families (Appendix B).

Content validity was accomplished through jury panels of public service experts. Separate jury panels examined the content of each of the curriculum guides, making revisions and/or modifications when necessary.

Extensive input was received from the U.S. Office of Education, the California State Department of Education staff, public agency administrators and associations, and administrators and teachers of appropriate public school programs.

Program Validity

Four major components were considered in the development and validation of the public service curriculum materials. First of all, the curriculum had to have content validity. That is, the content of the curriculum not only had to relate to the instructional objectives but more significantly, had to be comprehensive enough to cover the major areas of information and current job requirements in public service.

A second component was administrative feasibility. The proposed curriculum and program had to be implemented within the normal range of expenditures for regular classroom programs. A program that relied on maximum inservice of teachers and administrators, and above average facilities, equipment, and materials was considered unrealistic in public education today. It was also felt that the program should not require the employment of additional personnel, professional or paraprofessional, for its implementation. Therefore, the program had to be effective when used by the average classroom teacher with little or no inservice training in a normal classroom setting.

The third component was product usability. It was determined that in order for the program to succeed, the curriculum guides would have to be flexible enough to accommodate different styles of teaching. A program that allowed teachers to adapt the material to local needs rather than adopting the material in a lock-step fashion was probably going to be more effective. Any program which did not allow teachers to incorporate their ideas into the curriculum was probably going to remain on the shelf.

The curriculum would also have to be flexible enough to accommodate a general education and/or a vocational education mode. Thus it would have to be effective when correlated with other career education projects, work experience, disadvantaged programs, and team teaching.

A final component was student learning gain. The curriculum could not be considered successful if students exposed to the materials did not gain in the knowledge, skills and attitudes of the major areas of public service. Topics included in the curriculum were: self-awareness, employability skills, educational awareness, decision-making, and an appreciation for the world of work.

Curriculum Design and Development

The Public Service career family (or cluster) is a part of career education. It is one of the fifteen career clusters, designated by U.S.O.E., and comprising all occupations in the world of work. See Figure 1. The fundamental concept of career education is that all educational experiences, curricula, instruction, and counseling should be geared toward preparation for economic independence, while building an appreciation for the dignity of work. The Public Service curriculum seeks to implement this career education concept within the confines of the Public Service cluster.

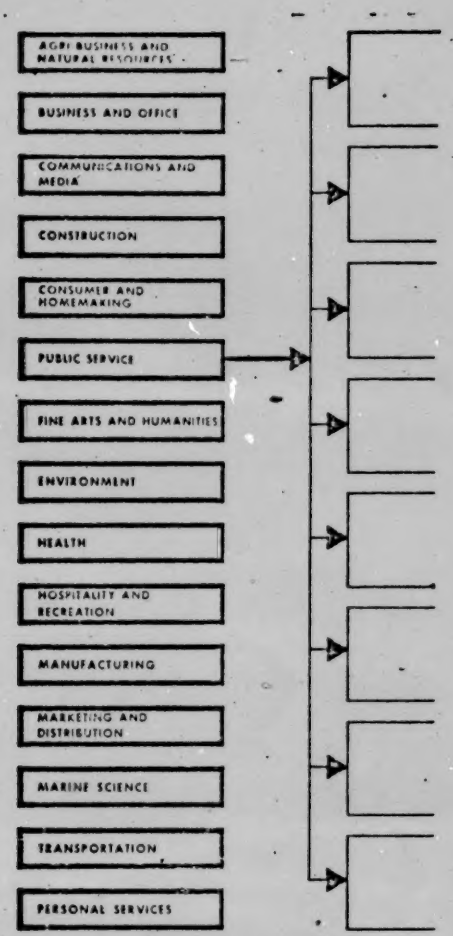



Figure 1 - U.S.O.E.-Designated Career Clusters

One of the key themes in career education is that students must be exposed to career education early in life and on a continuous basis in order to make effective decisions about their future occupations. An ongoing career education system gives students informed guidance, counseling, and instruction throughout their school years with progressively more specialized instruction as they advance into higher grades. Public service fits with other phases to form a comprehensive system of career education:

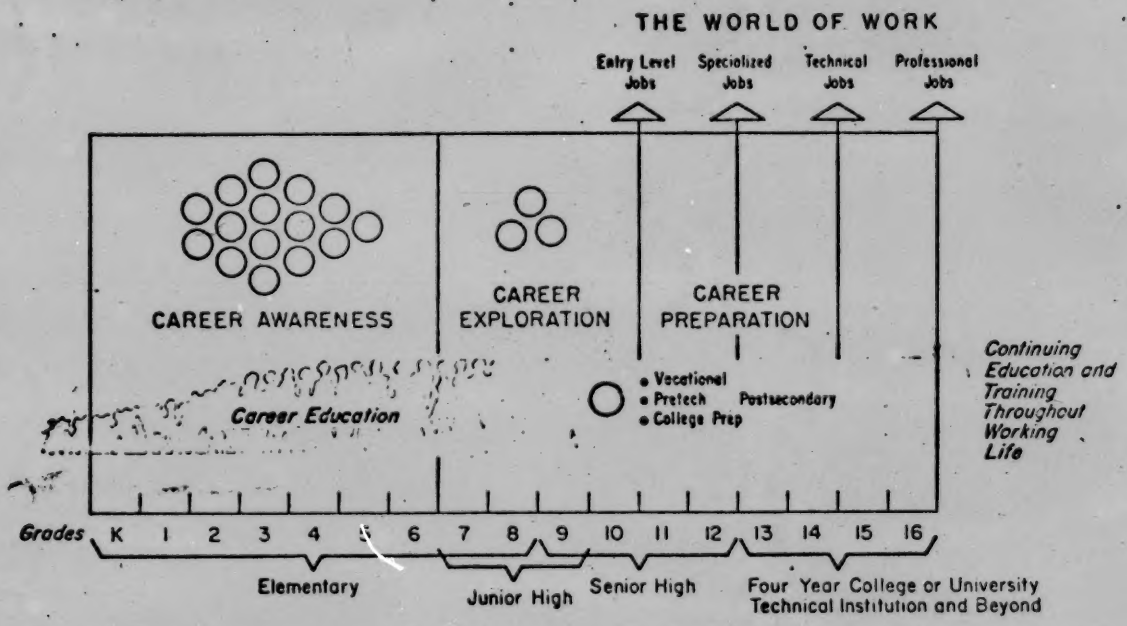



Figure 2 - Continuing Nature of Career Education

A fundamental step in developing materials for the public service occupations cluster was the definition of what is meant by "public service." The public service project staff, working in conjunction with a group of nationally prominent people who have expertise in the fields of local, state, and federal government, and also in secondary and post-secondary education, adopted this definition for public service:

> Public service occupations are those occupations pursued by persons performing the functions necessary to accomplish the missions of local, state, and federal government, excluding the military services and trades requiring an apprenticeship. These missions reflect the services desired or needed by individuals and groups...and are performed through arrangements or organizations established by society normally on a nonprofit basis, and usually supported by tax revenues.

Examination of the major functions of government, consistent with this definition, suggested its division into eight major occupational groups which reflect discrete occupational groups performed at local, state, and federal levels, and 39 major job families.

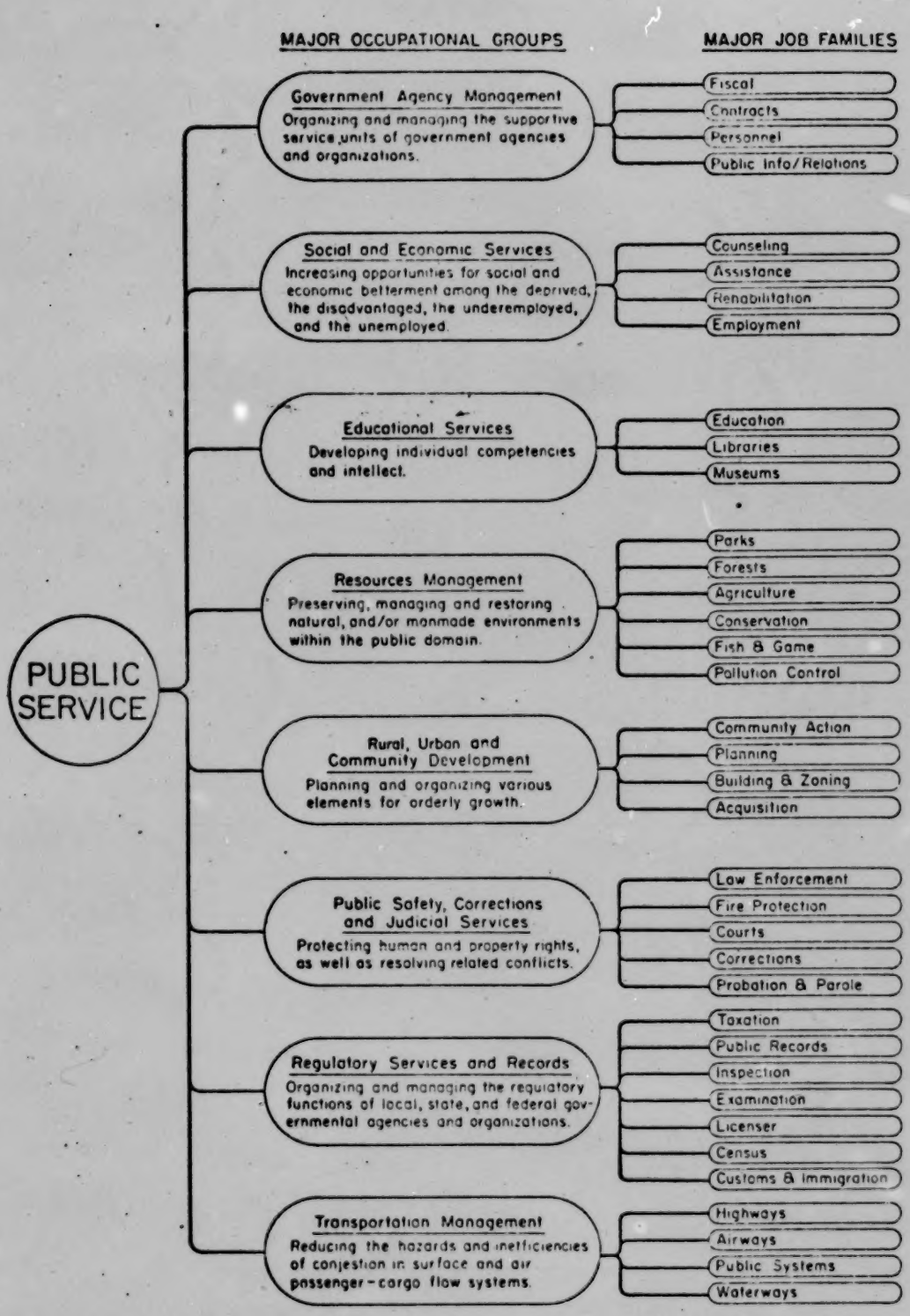



Figure 3 - Basic Occupational Groups - Public Service Cluster

Using the *Dictionary of Occupational Titles* (D.O.T.) as a base, 304 entry-level jobs were identified as falling within these "job families." Thirty of these jobs met additional selected criteria in that they had a career ladder; were open to youth, age 16-20; were open to less than high school graduates; had a good employment outlook in the next decade; and were national in scope. The National Advisory Committee and the project staff agreed that the inclusion of public health occupations could cause too much overlap with other career families and should not be included in this curriculum.

It was felt that an integral part of a public service curriculum should provide the opportunity for students to analyze career opportunities. Salary ranges, benefits, security, hazards and projection of demand should be a part of the curriculum guidelines. The guidelines should contain and describe appropriate career ladders and should include task analyses for both major job families and entry-level jobs. The life styles of these workers should also be highlighted.

Final Products - Teacher Curriculum Guides

The instructional guides utilize a unit approach, are directed to the teacher and are highly adaptable to various types of learning situations. Since each unit is self-contained, the teacher can readily select the objectives, content, and materials required to meet local needs. A brief description of the six curriculum guides and the implementation guide follows.

Exploring Public Service Occupations. This volume for grades 7-9, Phase II of the career education model, acquaints students with the purposes and functions of a variety of public service occupations while showing the relationship of the student's aptitudes, interests and values to careers in this cluster. It was designed to be easily infused into a junior high curricula. As in all of the

other curriculum guides, each section includes instructional objectives, teacher content material, student learning activities, teacher management activities, and suggested instructional resources. Unlike the rest of the guides, the individual student activities were designed to be duplicated by the teacher for student use. This volume relies heavily on similation, role-playing, and other techniques to meet objectives in the affective domain.

Orientation to Public Service Occupations for grades 9-11, covers Phase III of the career education model. It gives students an in-depth orientation to the eight major occupational groups within the public service family. The guide is comprehensive in that it covers the major areas of information in public service; i.e., career ladders, task analyses, benefits, salaries, and projections of demand in each occupational group.

Preparing for Public Service Occupations - The Common Core was designed for grades 11 and 12 and adult students as well. The Common Core was developed when it became apparent that there were commonalities in the competencies required for entry-level jobs in public service. A matrix of high-frequency and key tasks common to public service was developed in areas of high criticality within public service. Nine common core areas were identified from this matrix and comprised the common core. Although the guide covers written and oral communications, grooming, interpersonal relationships and decision-making, it follows the format of the other guides, including instructional objectives, content, student and teacher activities, and resources.

From the eight major occupational groups identified in the Orientation Guide, three occupational groups which had a high percentage of entry-level positions were chosen as specialty guides. The specialty areas within the preparation phase include:

Social Services, Law Enforcement Services, and Educational Services. Each of these guides has been designed to prepare students for entry-level work in those areas. The Common Core, Social Services, Law Enforcement Services, and Educational Services guides comprise the four Phase IV curriculum guides.

## Criterion Referenced Tests

Criterion referenced tests were developed which are keyed to each of the guides. A pre- post test was developed for each unit contained in the guide, allowing the teacher to objectively evaluate student learning gain. These criterion referenced tests are attached as appendices to the curriculum guides. Teachers may duplicate these tests for individual student use.

## Implementation Guide

Since the methods for implementing this program required clarification, an implementation guide designed for teachers and administrators was developed. Specifically, this document was prepared to help local school district personnel plan, organize, and articulate a public service program. Special help has been given in the use of the public service curriculum guides, relating work experience programs, and community involvement and resources. The Implementation Guide thus comprises the seventh and final document of the public service curriculum guides.

## Process Reports

Three process reports were prepared during the course of the project. The first report, "Selected Excerpts and Recommendations of the National Advisory and Review Committee Public Service Occupations Curriculum Project," was issued in January, 1972. This report was an outgrowth of the first meeting of the National Advisory

Committee and provides an insight into the problems encountered and decisions which were made in developing this career cluster. The second process report, "An Appraisal of the First Year and Recommended Activities and Strategies of the National Advisory and Review Committee," was issued in January, 1973. It presents the results of the second annual meeting of the National Advisory Committee with recommended activities and strategies for further implementation. A third process report, "An Appraisal of the Second Year and Recommended Activities and Strategies of the National Advisory and Review Committee," resulted from the third annual meeting of the Committee. This document, "Public Service Occupations Curriculum Project; A Final Report," summarizes the activities of the project and reports the findings of field testing in vocational and general modes of education. All four of these reports are available to curriculum researchers and other interested specialists through the ERIC System.

Related Products

Several spin-off activities resulted from the interest generated during the course of the project. A slide tape presentation explaining public service occupations was developed by Multimedia, Sacramento, California.

A series of ten 27-minute color films based on the common core was developed under a grant from the U.S.O.E. by Insight Communications, New York, New York. Nine of the films are directly related to the units of the Common Core, while the tenth gives a basic overview of the film series. Planned for home-based career education programs, the objectives of this series are to create an

awareness of the occupations in the public service cluster and to teach entry-level job skills that are common to most public service occupations. These films could also be used in a classroom mode to reinforce the public service classes, or as inservice training for entry-level public service employees.

As a part of their Choosing A Career Course, the McClatchy Broadcasting Company of Sacramento prepared eight radio interviews directly related to the eight major occupational groups in public service. These broadcasts were designed for in-school listening and were heard throughout northern California, Nevada, and Oregon. Also, numerous local educational agencies, research institutions, and state departments of education have used these guides as a resource in developing career education programs.

Field Test Sites

While many hundreds of workers in various occupational fields, educators, curriculum specialists and students had been involved in content design, it was a recommendation of the National Advisory and Review Committee that a comprehensive field testing and evaluation of these materials be conducted. While working within the resources of the project, it was logical that curriculum materials having national applicability should be validated in a variety of geographic locations and in a variety of educational settings. For these reasons, eight educational institutions, four in California and four in New York State were invited to participate in the pilot testing.

These locations were picked because of:

- ° different geographic locations
- ° varying population sizes
- ° urban and rural environments
- ° public and private school systems

Following is a brief description of the eight demonstration sites involved in pilot testing the public service curriculum.

The California Test Sites

The City of Long Beach, the second largest in Los Angeles County, is a center for federal, state, and county facilities for the Long Beach Harbor Area. Public employment accounts for 22 percent of the total labor force in the area and is expected to increase by 40 percent during the next decade.

Geographically, Long Beach is in a unique position - the Pacific Ocean to the South, Orange County to the East, Los Angeles to the Northwest, and several other cities to the Northeast. Two of the major employers in the area are Terminal Island Naval Shipyards and McDonald Douglass Aircraft.

The Long Beach Unified School District covers 128.45 square miles and is the second largest school district in Los Angeles County. In 1974 the general population was close to 500,000 with a student enrollment of over 90,000.

The Public Service Occupations class in Long Beach is held in a regional occupation center, receiving students from five high schools. Most of the students come

from North Long Beach which in the mid 1970's had a median family income of $6,662. A few students come from a nearby housing project, Carmelitos, and the Poly area (Downtown, Westside, Central areas) have always been represented in the public service class.

The City of Fremont is a young community undergoing a rapid transition. In 1956 five small, rural farming communities incorporated the City of Fremont covering 99.6 square miles. The population at that time was less than 15,000. In 1974 a special census showed the City of Fremont had reached 118,000 people. The entire community has undergone a rapid socio-economic change. While the population is still primarily caucasian, the black population has doubled in the last two years; and the Chicano population has remained approximately the same. Approximately 19.7 percent of the population is classified an ethnic minority. Because of its location, convenient to freeways, bridges across the bay, and the new B.A.R.T. rapid transit system, less than 25 percent of the people work within the City of Fremont. Approximately 25 percent commute northward to the Hayward/ Oakland area; 25 percent across the bridges to San Mateo and San Francisco counties; and approximately 25 percent commute south into the San Jose area and Santa Clara county. The job market for the people of Fremont has changed from an agriculture community to a diversified business and industry community. The average family income is $13,000 per year.

American High School, a comprehensive 9 through 12 school, opened in 1972. American High School is situated in an area of rapid growth. Thus the composition of the school is shifting in line with the total community. Over 9 percent of the parents in the feeder schools receive Aid for Dependent Children. In 1973-74 one-fourth of the students at American High School enrolled in office work experience education programs. One student in eight enrolled in Regional Occupational Programs for a total unduplicated enrollment of 36.8 percent in occupational training programs. An additional 28.1 percent were enrolled in comprehensive homemaking programs.

Students were enrolled in the following occupational clusters: agribusiness and natural resources, communications and media occupations, construction, public service, health, hospitality and recreation, marketing and distribution, transportation, personal services, and manufacturing. The February, 1974 enrollment at American High School was 1,585 with 36.8 percent enrolled in occupational training programs. The Fremont Unified School District enrolled 9,526 students in grades 9 through 12 with an average of 43.4 percent enrollment in occupational preparation programs. The entire school district enrolled 32,600 students in February of 1974.

The City of Orange is located within the County of Orange which lies adjacent to and southeasterly to Los Angeles County. Orange County comprises an area of 782 square miles of which 530 square miles are valley lands lying between the ocean on the southwest and the coastal mountain ranges on the east. Orange County, together with Los Angeles County, has absorbed, during the last fifteen years, 60% of the in-migration to Southern California. The result was a larger increase in the percentage of the age group five through fourteen in the total population. The increase in young people has had a great effect on the county's school system, the pattern of retail sales, and the type of houses that have been built. The land use pattern underwent drastic changes, resulting in urban land inundating the citrus groves. Thus, from a basically agricultural economy, Orange County has emerged as a great industrial center based on industrial manufacturing.

The City of Orange has for its inhabitants many major employment opportunities such as manufacturing, trades, finance and the construction industry. The school district has a broad economic base because of the close proximity to a large metropolitan trading area, which offers new industries availability of land, rail and highway transportation facilities and a large labor market. This industrial base is reflected in the rise of median family income in the City of Orange. Median annual income per family is $8,550, but the range is from 2.88% with incomes under $1,000 to 1.73% with incomes over $25,000. The largest group 17.43% has an income between $8,250 and $10,330.

The Orange Unified School District is comprised of five high schools, eight junior high schools and twenty-six elementary schools serving a student population of 29,462. Ethnic breakdown of the district is as follows: 30 American Indians; 114 Blacks; 488 Oriental; 2,779 Spanish Surnamed; and 26,051 White and other Non-white.

San Diego County extends 70 miles along the Pacific and 80 miles inland. Its sunny, mild temperature has made it among the fastest growing metropolitan area in the nation.

San Diego's spectacular beaches, golf courses, and other recreational facilities have made it one of the nation's top tourist attractions. The county's economy is based on tourism, manufacturing, agriculture, and the military. The county is among the U.S. counties in agricultural production. Its manufactured products exceed 1 1/2 billion dollars a year. Military personnel and military civilian employees comprise one-third of San Diego's work force.

The City of San Diego is the third largest city in the West and the fourteenth largest city in the United States. In 1970, the population of San Diego was 696,800. Of these persons, 88,600 were Spanish-Americans; 52,961 were black; 9,074 were Filipino; 3,881 were Japanese; and 2,619 were Chinese.

The San Diego Unified School District was selected as a test site because of its location, size, and urban environment includes a high percentage of disadvantaged students. A major emphasis of evaluation was to determine the flexibility of the curriculum guides to accommodate students defined as disadvantaged as well as nondisadvantaged students.

Pilot testing of the public service curriculum in this school district occurred at four school sites:

(1) Kearney High School

(2) Lincoln High School

(3) San Diego High School

(4) Wright Brothers Career High School

Funds were designated for two specific projects in connection with public service. The first project, "Public Service Occupations for Disadvantaged Students," received funding from Part D: VEA Amendments, 1968.

The second project, "Career Education for Public Service Occupations," involved staff development activities through the Educational Professional Development Act (EPDA), Part F funding. Three EPDA workshops were conducted under the directorship of the Public Service Coordinator at Wright Brothers Career High School. The workshops were designed to introduce interested teachers and administrators to the public service curriculum guides and to provide implementation suggestions.

It is important to note that no other test sites received any monies to implement the public service program.

New York Test Sites

Canisius High School is a private secondary school for boys located at approximately the geographic center of the city of Buffalo. Founded by the Society of Jesus (Jesuits) in 1870, it is chartered by the University of the State of New York and accredited by the Middle States Association of Colleges and Secondary Schools.

Although a constituent member of the Jesuit Secondary School Association and Roman Catholic in affiliation, it accepts applicants without bias. Some seven hundred students are served by a faculty of sixty administrators, counselors and teachers. The student body is drawn from a rather extensive area, with representation about equal from Catholic and public grade schools, from the city and the suburbs.

Academic standards are demanding, and the school is especially noted in Western New York for the number of college scholarships awarded each year to its graduates. All programs at Canisius are totally academic in nature. Coordinating the field testing at Canisius was a guidance counselor and an 11th grade social studies teacher.

The Oswego City School District encompasses some 65 square miles of land area and a population of 28,685. The district is located on the south shore of Lake Ontario about midway between the cities of Rochester and Watertown and 30 miles northwest of Syracuse. The city of Oswego, the most eastern major U.S. port on the Great Lakes, is the seat of Oswego County.

A huge new aluminum plant and three nuclear energy power complexes in close proximity are bringing new people and business into the community. A rapidly

expanding state university college with a thousand-acre campus is located in the suburbs of the city, and newly constructed homes as well as 19th century mansions provide a variety of settings for a community with a historic past and a promising future.

The enlarged city school district of Oswego has a pupil enrollment of 5,300. The system has five K-6 schools; one Middle School, grades 7 and 8; and a senior high school, grades 9-12, opened in 1971. Student population at the Middle School is approximately 900. Additionally, a county vocational school was completed in 1970.

The professional staff numbers 310 including 26 administrators, 258 teachers, 5 part-time physicians, 8 nurses, 2 dental hygienists, 2 speech therapists, 2 part-time psychologists, and 7 librarians.

Coordinating the field testing at the Oswego Middle School were the team leaders for Science and Social Studies. The Middle School was the only school in this district participating in this field testing.

The Sweet Home Central School District is located just north of the City of Buffalo. Centralized in 1950, it has experienced a rapid development from a rural area into one of Buffalo's fastest growing suburban sections. Since 1955, enrollment has increased at the rate of four to five hundred students a year. Present enrollment is 7,500 and the latest projections reveal that the fourteen square mile district has a potential of approximately 12,000 students.

The district's chief intersection, Sheridan Drive and Niagara Falls Boulevard, is the state's second busiest corner--topped only by Times Square in New York City.

An interstate highway passes through the district and offers commuters direct access to the New York Thruway. The heart of downtown Buffalo is twenty minutes to the South and Niagara Falls lies thirty minutes to the North.

The district is the new home of the 1500 acre campus of the State University of New York at Buffalo which is soon expecting an enrollment of over 25,000 students. The presence of a large university is expected to stimulate physical growth of the district and will bring many new and positive influences to both the school system and to the community. A great influx of public service workers is expected to result from this.

All of the present educational facilities were constructed after the 1950 centralization. The original senior high school was opened in 1958 and a 1250 pupil addition was opened in 1971. A new elementary school opened in 1971. The district contains six elementary schools; one junior high school (7 and 8) and a senior high school (9-12).

The district K-12 curriculum coordinator, a junior high school administrative assistant and the chairman of the junior high school social studies department coordinated pilot testing activities. While this report concerns itself with the junior high school only, the district senior high school also elected to become involved in use of the curriculum materials and in field testing.

The Williamsville Central School District community is suburban in nature and is located less than half an hour's drive from downtown Buffalo. Metropolitan Buffalo has a population approaching one and one-half million and is one of the major industrial centers of the country. The district is experiencing rapid population growth with several new communities being built within its borders and is adjacent to the new campus of an expanding major university.

The 12,000 students of the district are served by seven elementary schools (K-5), three middle schools (6-8), and two high schools (9-12). A third high school is being built for 2,000 students and completion is expected for the 1975-76 school year.

Long range planning for facilities must take into consideration the projected continuing growth of the student population which will reach 13,500 by 1976 and may total 20,000 by 1985.

The district employs a professional staff of 720 and approximately 600 others in the non-professional categories. A high ratio of instructional staff to students is maintained and a differentiated staffing organization is operative. Team leaders, teachers, teacher aides, and student teachers work effectively together as instructional teams. Approximately 70% of elementary school staff, 30% of middle school staff and 25% of high school staff operate within this type of instructional organization.

Student enrollments are approximately 5200 in K-5, 3,000 in grades 6-8, and 3,900 in grades 9-12. North High School student enrollment is approximately 2300 and South High School approximately 1600. An assistant principal at each high school coordinated the field testing.

Coordinating activities at the New York State test sites was a professor of education from the State University of New York College at Buffalo who was also a member of the Public Service Occupations Curriculum Project's National Advisory and Review Committee and who had also participated in developing portions of the curriculum materials.

## Teacher Inservice and Field Test Preparation

Before field testing was begun, the Director of Vocational Education in Long Beach Unified School District and the teacher selected to teach the public service occupations course were employed as consultants to the Public Service Occupations Curriculum Project. These consultants have played an integral part in the evaluation and revision of the instructional materials. They received inservice training which consisted of an orientation to the Public Service Occupations Curriculum Project. In addition, they reviewed the curriculum guidelines for the 8 major occupational groups, and made preliminary determination of curriculum guidelines materials to be emphasized during the pilot testing. At this time they evaluated and selected resources for the course from the instructional materials. They also assisted with the development of pre- and post written tests for students.

In contrast to Long Beach, very little inservice training of the Fremont and Orange staffs was conducted. This allowed the PSOCP staff to evaluate the importance of prior inservice training to program success.

Under an EPDA grant, the San Diego Unified School District conducted an inservice training session, September 25-27, 1973, for teachers and administrators who were or would soon be directly involved in the teaching of the public service occupations curriculum. Test site personnel from the California and New York sites participated in this session.

## Evaluation Content and Procedures

It was agreed by the project staff and the National Advisory and Review Committee that pilot testing is only one aspect of evaluation. Evaluation should be broadly based and should include both empirical and subjective data.

The main purposes of evaluation are to judge the usability and usefulness of the curriculum materials. Thus, both the curriculum products and the process of implementing the program had to be assessed.

In order to evaluate the product and process of the curriculum, a combination of both objective and subjective measures were implemented. Content validity was assessed by the use of jury panels of experts in public service and evaluation questionnaires given to the teachers and students involved in public service classes.

Administrative feasibility was evaluated by the use of structured interviews designed to obtain specific information and questionnaires.

Product usability was assessed by evaluation questionnaires, structured interviews, and project staff observation.

Student learning gain was determined by the administration of pre- and post tests based on the instructional objectives of each unit. Since the approach was not designed to measure the relative standing of each student but rather to judge how well they attained the required standard of comprehension and competence specified for each objective, the measures developed are criterion referenced tests. Structured interviews were given to randomly selected students as well as evaluation questionnaires.

As an integral part of this evaluation, appropriate modifications in the materials and/or procedures were made when necessary. As a result of the field testing during the 1973-74 school year, revisions were made in parts of the curriculum. The major findings of these evaluative procedures are reported in Sections 3 and 4 of this final report.

SECTION 3

PUBLIC SERVICE OCCUPATIONS IN A VOCATIONAL EDUCATION MODE

## Student Questionnaires

In order to elicit student opinion about the public service program, a questionnaire was designed and administered to random samples of students in the program. This part of the document reports the data gathered from these questionnaires.

Question One. The subject matter in this class is

- [2] very difficult
- [73] of average difficulty
- [5] too easy

There was no discernible difference between students who could be classified as disadvantaged or nondisadvantaged. Comments from students included:

"The material is hard enough for me to learn something from it but not so hard that I feel pressured."

"The work can be difficult at times."

"You can understand the subject."

Question Two. I understand the subject best when

[49] the teacher lectures from the material

[25] the teacher duplicates the material for the class to read

Since the curriculum guides were written for teacher information, the reading level and style are related to teachers rather than students. However, it appears that some teachers did duplicate the materials for students on some occasions. There was no apparent correlation between the difficulty of the subject matter (Question 1) and the students who indicated the teacher duplicated the material.

Question Three. The subject matter

| Does not cover the subjects well | Covers the subjects well |
|---|---|
| 10 | 69 |

The comments of several students are very revealing concerning the comprehensiveness of the materials. One student who thought the curriculum covered the subjects well added, "In fact, it covers too much." Two students who did not feel the subjects were covered well alluded to the length of time one should be in the class.

"I feel this should be a year's class because there are so many occupations, it's impossible to cover everything well."

"Should be a year (2 semester) class."

Question Four. How important to you are the following in learning the subject?

| | Not Important | Of Some Importance | Very Important |
|---|---|---|---|
| Speakers | 8 | 33 | 37 |
| Field Trips | 7 | 21 | 48 |
| Lectures | 7 | 40 | 30 |
| Curriculum guide material | 5 | 45 | 27 |
| Class discussions | 3 | 31 | 40 |
| Activities and projects | 11 | 35 | 31 |
| Work experience | 6 | 22 | 47 |

It is apparent that all of these components are important to the implementation of a good public service program.

"What I thought were good points of the program was the speakers. We've had speakers from probably every aspect of career choices that I have been interested in."

"I am working at the Mental Health Center...I am actively interested in what I'm learning. This is a feeling that I hadn't experienced as much or as deeply in the regular school system. I look forward to every Monday, Wednesday, and Friday at the Center."

"I have been working in a company that develops educational materials and programs for grammar school children. I have been given assignments to write children's stories for kindergartners, first and second graders, using the simplest vocabulary I know and a thirty-eight word 'word list.' It has been a challenge, a discipline, and I have learned more than was ever possible in a classroom."

Question Five. Would you enjoy this class more if it had a textbook and was more like other classes?

Yes 5 No 75

While one student responded, "no way," another would have preferred a textbook and a workbook. (This student was placed in the class because it was the only one open.) Other student comments were: "We learn enough by discussion." "I like the way it is." "You would learn much more in an informal class with discussions in which everyone participates." "This class is based on the individual and if everyone was taught the same no one would get the full benefit." "I think you learn more from general information than from one contained source." Two students stated that the teacher used textbooks when necessary.

An overwhelming majority of students were enthusiastic about the structure of the curriculum.

Question Six. How much did you learn about the following career groups?

| | Quite a Bit | Some | Very Little |
|---|---|---|---|
| Governmental Agency Management | 28 | 41 | 6 |
| Social and Economic Services | 45 | 22 | 1 |
| Educational Services | 34 | 32 | 7 |
| Resources Management | 29 | 29 | 11 |
| Rural, Urban, & Community Development | 25 | 32 | 7 |
| Public Safety, Corrections & Judicial Services | 24 | 29 | 9 |
| Regulatory Services & Records | 8 | 26 | 19 |
| Transportation Services | 16 | 36 | 8 |
| Common Core | 18 | 23 | 12 |

Although the emphasis placed on each subject varied from class to class, only 5 out of 80 students indicated that they had not gained in knowledge in most areas. Most responses in all areas were "Quite a Bit" or "Some." A few students indicated that some areas would be covered more thoroughly during the second semester. In addition, because the curriculum was tested in varying geographical areas, individual teachers place varying degrees of importance to the career groups in public service.

Question Seven. How interesting was each career group to you? The students answered:

| | Very | Some | Not Interesting |
|---|---|---|---|
| Government Agency Management | 25 | 45 | 3 |
| Social and Economic Services | 41 | 27 | 3 |
| Educational Services | 31 | 34 | 8 |
| Resources Management | 28 | 32 | 6 |
| Rural, Urban & Community Development | 21 | 39 | 3 |
| Public Safety, Corrections & Judicial Services | 28 | 30 | 3 |
| Regulatory Services | 15 | 27 | 13 |
| Transportation | 18 | 33 | 9 |

Although student interest varied between the subject areas, the data show that all of the areas had a high interest level. Some students commented on the interest level of the material on different parts of the questionnaire. In answering question one on the ease of the material, more than one student wrote, "very interesting."

Question Eight. The activities that are done in this class are:

[2] Too hard

[70] Satisfactory

[2] Too easy

One student commented: "Not too hard, but not too easy. Just the way I like it."

Another responded to this question by commenting, "The class was very educational."

In general, the vast majority of the students (96 percent) thought the activities were "just right."

Question Nine. The activities are:

[8] Dull

[63] Interesting

Sixty-three students found the activities interesting.

"I really like them."

"They are always very interesting."

"Very interesting, I always look forward to attending this class."

Eight people found the activities dull. One student said, "Not that good."

Three students found the activities fair. They reported:

"They're not actually dull, but are sort of interesting."

"They're not dull, but they're not so interesting."

Nine students while answering that the activities were interesting indicated that some were and some weren't.

"It depends on the subject matter."

"Sometimes dull, sometimes interesting."

The student activities and teacher management activities at the end of each unit were designed to give the teacher flexibility in teaching the class. Not only is the teacher free to do only those activities which meet the needs of the class, but the teacher is also able to substitute ideas which may help the class meet the instructional objectives at the beginning of each unit. In other words, the activities should lead the creative teacher to more activities to do.

Questions ten and eleven were related to the pre- post tests that accompany each unit.

Question Ten. The pre- post tests were:

[1] Too easy

[65] Of average difficulty

[4] Too hard

One student stated, "If one paid attention and did his work, the tests were fairly easy."

Question Eleven. Do you feel that the tests were helpful in letting the teacher know what you had learned? Yes 66 No 7

Students who answered "No" commented: "Yes and no. Some people cannot put on paper what they learned. Tests are important, but sometimes not useful in some circumstances." "I felt that the teacher had already sufficient knowledge of what I had learned." "No, because a lot of the things I learned were done on the job."

The project staff for these reasons encouraged the public service teachers to use other means as well as tests to evaluate student learning gain. In fact, the teachers were encouraged to add or delete test questions to meet their needs.

In Question twelve, students were asked to evaluate their gain in career education concepts.

Did you gain in:

| | | |
|---|---|---|
| Career awareness | Yes 73 | No 4 |
| Self awareness | Yes 75 | No 4 |
| Attitude toward work | Yes 73 | No 7 |
| Economic awareness | Yes 72 | No 7 |
| Knowing how to get and keep a job | Yes 75 | No 3 |
| Decision-making | Yes 59 | No 18 |
| Knowing the part education plays in career choice | Yes 78 | No 1 |

It is significant that so many students were able to see the relationship of career choice to education, even in disadvantaged areas. The large number of students who felt they had not gained in decision-making could be due to the tendency to teach the Common Core later in the school year or the next year. Some teachers, however, have combined the teaching of the Orientation Guide with the Common Core, feeling that these skills are necessary to a successful work experience for the student.

Question Thirteen. Did you find a job as a result of this course?

Twenty-two students had found jobs related to public service.

"I found a part-time job working in an extended Day Care Center."

"A very good job. I worked during this semester I was in class and I learned quite a bit."

"I found a job with the Department of Fish and Game."

Several students replied that they had jobs before the course began, and several stated that they really hadn't tried to find a job.

Question Fourteen. After taking this class, are you interested in a career in public service?

Yes 70 No 8 Undecided 3

"I never thought there were so many career opportunities in public service."

"I found many public service jobs that I was interested in."

Interestingly enough, three students who found out that they were not interested in a public service job were very enthusiastic about the class. One student stated, "It's not what I want to be in, but it is more interesting than my other classes." All three stated that they were more interested in coming to the public service class, the attitudes of their parents were positive, and they would recommend the class to other students. Two students rated the class "excellent" and one rated it "good."

Question Fifteen. Were you more interested in coming to this class than your other classes?

While the interest level of 21 students remained the same as their other classes, 57 students were more interested in coming to the public service class.

"It is more interesting than my other classes."

"I didn't know about this class, but when I got into it, I really liked it."

"The material was always so interesting. I actually looked forward to this class unlike my other classes."

Question Sixteen. What was the attitude of your parents toward this class?

Positive 41 Same as other classes 34 Negative 3

One student whose parents had a negative attitude about the class stated, "they didn't know." The student, however, had a positive attitude and rated the class "excellent."

Other student comments:

"They thought it might help me in getting a job."

"They liked it as much as I did."

"When I came home and talked about it, they thought the learning experiences were valuable."

Question Seventeen. Would you recommend this class to another student?

Yes 74 No 4 Undecided 3

This question elicited the most comments from the students. One student who had a favorable impression of the class answered "no" because "they have to learn themselves." Three students who answered "yes" qualified their answers by saying "It depends on whether the student gives me some idea of what they want to learn" or "if he was interested in public service."

The majority had already recommended the class to other students. "Yes I would. Anyone wanting to learn about attaining a job." "Because in the future, government jobs will have good and stable incomes compared to say a salesman." "Three friends have already signed." "It's the best class I have ever been in."

In questions eighteen and nineteen, the students were asked to give an overall rating of the public service program and to suggest improvements in the curriculum.

Question Eighteen. Overall, this class was

Poor 0 Fair 10 Good 46 Excellent 25

Question Nineteen. How do you think this class could be improved?

Three students felt the need for more written material; 12 students wanted more field trips; 2 students wanted increased student enrollment; 2 were concerned with the type of credit given; 6 wanted more help in getting a job and job placement; and others felt they needed less homework, notes, but more activities and projects.

Two students suggested that it be a full year course.

Twenty-two students did not respond to the question of how the course could be improved. Twenty-one students did not want the course changed in any way. "It's good enough and needs no improvement." "It's all right the way it is."

"I think that this class covers all that it should and gives all of the information we need."

There was no discernible difference between those students who could be classified advantaged or nondisadvantaged. The overwhelming majority of students were highly enthusiastic about this program. As one student said, "I'd like to take it again next year!"

Another wrote, "This program has been the most enlightening educational experience in my four years of high school. A senior in high school is expected to know what he/she wants to do, where he/she plans to go to school and generally plan his/her life in about six months. Needless to say, this is a very difficult task and before I make any vital decisions, I want to know what I'm in for. This program has given me an opportunity to work in the field of my choice, thus giving me some idea of what I would be doing, should I choose this vocation. As well as getting a taste of the field of my interest, I have been exposed to a vast variety of people who have informed us what these careers involve and offer. If I find that I really wouldn't be suited to the vocation I chose, then I will be saving a tremendous amount of time and energy instead of pursuing that field and finding out later that I made a mistake. I think every senior should have the right to participate in a program like this because it is helping him/her make one of the most important decisions in his/her life.

I have done a lot of growing in this class, and have been given a lot of responsibility. I am indebted to this program for that. Thank you."

Teacher Questionnaires

Teacher questionnaires were given to teachers in the problem to assess product usability.

Question One. The instructional objectives are:

- ☐ too easy
- ☐ easy to accomplish in a reasonable time
- ☐ too difficult to achieve in a reasonable time

Teachers A, B, C. E, and F felt the instructional objectives were easy to accomplish in a reasonable time. Teacher D felt they were poor for low ability (disadvantaged) students.

Question Two. The content material:

- ☐ did not cover the subjects well
- ☐ covered the subjects satisfactorily
- ☐ was too difficult to teach

Teachers A, B, C, D, and E felt the content material covered the subjects satisfactorily. Teacher F felt the content material did not cover the subjects well and stated it "was on a too high of employment level."

Question Three. The style of the content material:

- ☐ was too easy for the teacher to rephrase
- ☐ was satisfactory for the teacher to rephrase
- ☐ was too difficult for the teacher to rephrase

All of the teachers replied that the style of the content material was rephrased satisfactorily.

Question Four. The content material was taught by:

- ☐ the teacher lecturing from the material
- ☐ giving the students the material in duplicated form
- ☐ not using the curriculum guides at all

Teachers A and C lectured from the curriculum guides. Teachers B, D, E, and F used a combination of lecturing from the guides and giving students duplicated information.

Teacher F: "I supplemented much of the material with local information and also tried to get to the lower level entry jobs."

Question Five. When the content material was duplicated:

- ☐ only a small portion of the class could understand it
- ☐ half of the class could understand it
- ☐ most of the class could understand it

Teacher C never duplicated the material.

Teachers A and D reported that half of the class could understand the material in duplicated form. Teachers B and E stated that most of the class could understand it. Teacher F said only a small portion of the class could understand it.

This was surprising to the project staff because the teacher content material was not designed to be duplicated for student use.

Teacher E commented: "Those with a fifth grade reading ability had no problem."

Question Six. When the material was duplicated:

- ☐ most of the class was bored
- ☐ the class found the material interesting
- ☐ the class was excited by the material

Again, Teacher C did not duplicate the material. Teacher F had problems with the duplicated material. Teacher D's class found the duplicated curriculum boring. Teachers A, B, and E stated their classes found the duplicated curriculum material interesting.

This, too, was a surprise to the project staff since it was felt in the beginning and conveyed to the test site teachers that duplicating the teacher's guides would probably not be exciting or interesting to students.

The next three questions were related to the usability of the teacher management and student activities.

Question Seven. What percentage of the teacher management activities and student activities were easy to do? hard to do?

Teachers A and B found over 50% of the activities interesting. Teachers C, D, E, and F found 50% of the activities dull and 50% of the activities interesting. Teacher E stated, "These activities were well planned and easy to use."

Question Eight. The teacher management activities made the instructor think of other activities for the class to do:

True_____ False_____

Teachers A, B, C, D, and E answered True. Teacher F responded False and commented, "Some of these activities are only realistic with the most advanced students."

Teacher D added, "The teacher has to improvise."

Question Nine. The format of the curriculum guides allows the instructor to select those activities which would appeal to the class:

True_____ False_____

Teachers A, B, C, E, and F answered True. Teacher D did not respond.

The format of the guides was designed to give teachers flexibility in choosing activities to meet their needs. Those activities which are interesting to one class may not interest another class at all. In the absence of a lock-step curriculum which must be adopted in total, much of the success of the program relies on the teacher's willingness to discriminate and to improvise to meet the needs of the class.

Question Ten. What percentage of the resource material could the teacher find?

Teacher E found over 50%. Teachers A, C, and F found 50% of the materials.

Teacher E commented, "Most of the resource materials should be available in large school districts. It does take time and some imagination to gather the materials needed for the class."

Teacher B stated, "To be honest we have had so much resource material of our own we haven't had to go to the guides' listed resources yet."

Teacher D found under 25% - "unavailable or being used."

Question Eleven. Other related materials were:

- ☐ easy to find
- ☐ found with little difficulty
- ☐ hard to find

Teachers A, B, and C reported related materials are easy to find. Teacher A says, "Use resources at the different departments." Teacher C has used an abundance of printed materials and films from every government agency in his locale.

Teacher E reported the materials are found with little difficulty.

Teachers D and F found related materials hard to find, even though they are in a large city school district.

Teacher D commented, "The films and other materials are always out of stock." It would appear that some teachers were more successful than others in finding related materials.

Question Twelve. Were the curriculum guides easily adaptable to your teaching style:

Yes_____ No_____

Teachers A, B, C, D, and E responded "yes." Teacher F responded "Yes and No. The lattices and other related areas were difficult, also the job qualification parts."

Question Thirteen. Do you feel that the curriculum can be taught with a minimum of inservice training?

Teachers B, C, D, and E replied "yes." Teachers A and F replied "no."

The Implementation Guide was developed to assist educators who have not had inservice training who wish to implement a public service program

Question Fourteen. Can the curriculum guides and their various sub-sections be taught as separate entities?

All of the teachers responded "yes." It does appear that the curriculum guides are flexible enough to be adaptable to many teaching styles with a minimum of inservice training.

The next two questions are related to the usability to the pre- post tests.

Question Fifteen. Were the pre- post tests easy to administer?

Teacher C replied "no," and commented, "too lengthy." All of the other teachers responded "yes" to this question.

Question Sixteen. Were they helpful to you in gauging student learning gain?

Teachers A, B, and F replied "yes." Teacher E was undecided. Teachers C and D replied, "no."

The next two questions are directly related to the flexibility of the curriculum.

Question Seventeen. Were students able to work on individual projects based on the curriculum?

All of the teachers responded, "yes," to this question.

Question Eighteen. How much time do you feel should be spent on each component?

In percentages:

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Lecturing on content material | 25 | 6 | 20 | | 10 | 5 |
| Movies, filmstrips, and other A/V materials | 10 | 6 | 20 | | 20 | 10 |
| Printed resource materials and textbooks | 15 | 3 | 20 | | 10 | 15 |
| Field trips | 50 | 2 | 10 | NO RESPONSE | 25 | 65 |
| Work experience | | 80 | 20 | | 25 | |
| Teacher management and student activities | | 3 | 10 | | 10 | 5 |

It is significant that none of the teachers agreed entirely of the importance of each component, and none taught the course in the same manner.

The next nine questions are related to student learning gain and interest.

Question Nineteen. What percentage of students were about to meet the instructional objectives:

☐ 25% ☐ 50% ☐ 75%

Teachers A, B, and F reported over 75% were able to accomplish the objectives. Teachers C, D, and E reported 50% met the objectives.

Question Twenty. Do you feel students gained in knowledge as a result of this curriculum?

All the teachers responded "yes." Teacher D stated, "We stressed much more of the general job finding information and the Common Core."

Question Twenty-one. Do you feel the information gained was of value to students?

All of the teachers responded "yes." Teacher D, "To those really interested, a big help!"

Question Twenty-two. Did the students gain:

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Career awareness | yes | yes | yes | yes | yes | yes |
| Self awareness | yes | yes | yes | yes | yes | yes |
| Appreciations and attitudes | yes | yes | yes | yes | yes | yes |
| Economic awareness | yes | yes | yes | yes | yes | yes |
| Employability skills | yes | yes | yes | yes | yes | yes |
| Decision-making | yes | yes | yes | yes | yes | yes |
| Educational awareness | yes | yes | yes | yes | yes | yes |
| Citizenship | no | yes | yes | yes & no | no | yes |

Teacher E commented, "All students gained. Those in the class for two semesters showed tremendous improvement."

On the student questionnaires, one student commented, "Working with professionals is a gas. These people I work with have gone to school for ten years and are they smart. They are also mature. They treat me with respect because I show them respect. This experience has given me respect for the criminal justice system. It is a system that I thought was corrupt before I was a part of it, but now I know it is the best possible solution to a complex problem."

Question Twenty-three. How many of your students actually found jobs as a result of this course?

Teacher A, "Five in recreation."

Teacher B, "Seven."

Teacher C, "Through work-study and other regular government agency jobs, roughly 30%."

Teacher D, "Five. A few more have leads."

Teacher E, "Fifteen."

Teacher F, "None."

Most of the teachers in the program made extensive use of commercial prepared books geared to help students and adults pass civil service tests. This help, along with simulated interviews, resume writing, and help in filling out application forms was felt to be of great benefit to the students. As a result of this help, an above average number of students were able to pass civil service tests. Teacher B reported that all of his students who were eligible to take civil service tests (graduating seniors) were placed on eligibility lists. As

one student remarked, "My public service teachers have taught me more practical necessary information than I felt I have learned in the past three years, at least regarding the subject of English."

Question Twenty-four. The tardiness and absenteeism of the class was:

- ☐ below average
- ☐ average
- ☐ above average

Teachers A, C, and E replied that tardiness and absenteeism in their classes were below average. Teachers B, D, and F stated theirs was average.

Question Twenty-five. How has the interest in taking this class gone?

Up_____ Same_____ Down_____

All of the teachers stated that interest in taking the class had gone up in their school.

Question Twenty-six. What has been the attitude of parents toward this class:

Positive_____ Same as other classes _____ Negative_____

Teacher A did not respond. Teachers B, C, D, and E reported a positive attitude from parents. Teacher F replied, "I don't know."

From the comments from all of the teachers, it seems apparent that the public service program was well accepted by students and parents.

The next part of the questionnaire dealt with the relationship of the public service program and the school at large.

Question Twenty-seven. Scheduling this class is:

- ☐ not a problem
- ☐ a minor problem
- ☐ relatively difficult

Teachers A, B, C found it to be a minor problem, Teacher E felt it is not a problem, while Teachers D and F found it difficult. Most found a two-hour block best due to the many field trips needed for this class. One found a two-hour block at the end of the day best.

Question Twenty-eight. Facilities for this class is:

- ☐ not a problem
- ☐ a minor problem
- ☐ a major problem

Teacher D felt this was a minor problem while Teacher F felt it was a major problem. Teachers A, B, C and E found facilities were not a problem since an ordinary classroom was all that was required. One public service program that was not a field test site held its program in a church with no difficulty at all.

Question Twenty-nine. How many teachers, counselors, and administrators were involved in this course?

While only one teacher was involved at each school, the number of counselors and administrators involved in the program varied.

Teacher A reported 4 counselors and 1 administrator involved. Teacher B reported 2 administrators and at least 6 to 8 counselors. Teacher C is in a regional occupational program so many teachers and administrators were involved. Teacher D reported 2 principals and 2 counselors. Teacher E stated that 2 counselors, 1 principal, and 1 occupational leader were involved. Teacher F did not know.

Question Thirty. Did the public service course influence the curriculum or style of other classes?

Teachers B and F were unsure. However, Teacher A, C, D, and E replied "yes."

Teacher E wrote, "The Common Core was very attractive to other teachers. I could hardly keep my copies together."

Teacher D said, "Other teachers have borrowed ideas and materials to use as mini-courses in their classes.

Four teachers, A, B, C, and E, felt the course increased the relevance of other subjects. Three teachers, B, D, and E, saw more cooperation between academic and vocational teachers.

Question Thirty-one. Were special displays and programs put on that affected the entire student body?

Teachers A, C, D, and E replied "yes.". Teacher B did not respond and Teacher F replied "no."

Question Thirty-two. Were alumni and persons from the community used as resource persons?

All teachers except Teacher F replied "yes." Teacher D replied "They are very helpful!"

Question Thirty-three. Did the guidance department give substantial help in steering the appropriate students?

Teachers A, B, C, and D replied "yes." Teacher E said "no," and Teacher F did not know.

Question Thirty-four. How well did this course relate to other courses and work experience?

Teachers A, D, E, and F rated it satisfactory and Teachers B and C said it related well.

Question Thirty-five. How important to the success of the program is:

| | None | Some | Very |
|---|---|---|---|
| Work experience | D | F, A | B, C, E |
| Inservice training | D | E | F, B, A, C |
| Advisory committees | D | F, B | A, C, E |
| Reource persons | | B | F, A, C, E, D |
| Field trips | | B | F, A, C, E, D |

Although there is a diversity of opinion on each area, it appears that most of the teachers felt work experience, inservice training, advisory committees, resource persons, and field trips were important in the implementation of a successful program.

Question Thirty-six. The attitude of administrators and guidance personnel toward this course has been:

Poor___ Satisfactory___ Good___ Excellent___

Teacher A replied "excellent," Teachers B, C, and E responded "good," and added "We're getting more cooperation."

Question Thirty-seven. What problems did you encounter in teaching this course?

Teacher A; "None."

Teacher B: "I can't really say that I have had any major problems."

Teacher C: "Student recruitment - finding the right students."

Teacher D: "A lack of textbooks and materials that don't have to be duplicated."

Teacher E: "None."

Teacher F: "Finding more information about entry level jobs."

Question Thirty-eight. Overall, what is your feeling about this curriculum and the course?

Teacher F: "I think much time is required for preparation. I would like to have one semester to prepare for a class later on."

Teacher E: "Very good."

Teacher D: "This course is excellent and needs to be expanded."

Teacher C: "Very good."

Teacher A: "Very positive."

Teacher B: "We have students working on twenty training sites and all thirty-four students are employed. All have been oriented on filling out federal and state applications to take tests and get on eligibility lists. I have received very high praise from supervisors on training sites as to the quality of work the students do and the quality of our program in general. I have been told many times that this is the best program of its kind that they have ever seen. I believe they were sincere because they volunteered the information.

For a program that was new in September and had no training sites, I think we are definitely off the ground now and gaining momentum every day. The kids enjoy the work and I enjoy teaching them. It's just a great program."

Administrators Questionnaire

In order to assess administrative feasibility, questionnaires were sent to administrators involved in the program. This portion reports the data gathered from ten administrators who implemented the public service program.

Question One. What was the cost factor in implementing your public service course?

6 Below Average 4 Average ___ Above Average

Comment: "No capital outlay. Only field trips and a few textbooks."

Question Two. Finding a teacher qualified to teach this course was:

___ Easy 9 Of average difficulty 1 Difficult

Question Three. The facilities required for this course were:

8 Usual 2 Unusual

One administrator who answered unusual commented, "This course has students in the community 80% of the time."

Question Four. Scheduling this course is:

2 No problem 8 A minor problem ___ A major problem

"Needs blocks of time for field visitations."

"Type of credit given was initially an obstacle to sufficient enrollment."

"Due to getting students out in the community."

"This was a minor problem because students come from all five high schools campuses to one site."

"All single offering courses are a minor scheduling problem."

Question Five. What type of scheduling works best for this course?

"2-3 hours daily for 1-2 semesters."

"Block scheduling."

"Two-hour block - need ample time for field trips."

"Near the end of the day."

"Classes scheduled at the end of the school day are best."

Question Six. What kind of equipment was used to teach this course?

All of the administrators stated that only regular teacher materials and audio-visual school equipment was used.

"Equipment used represented only usual costs."

"Standard A/V equipment--projectors, tape recorders, etc.

Question Seven. Was staff preparation time excessive for this course?

2 Yes 8 No

"Not excessive, but as a new offering it takes time to organize and present the material."

"Teacher should have one preparation period to work with community resources."

"It is necessary to do a tremendous amount of planning and organization for such a class as this. In addition, time is needed to arrange vitally important field trips, etc."

Question Eight. Were teacher demands for this course excessive?

___ Yes 10 No

"In our case 'no,' but could be with a disinterested teacher."

Question Nine. What were the major problems the instructor encountered?

The major problems cited were student recruitment and securing the cooperation of public agencies. One administrator felt the instructor did not have adequate preparation time, while one felt the instructor had not encountered any major problems.

Question Ten. What was the attitude of the instructor toward this course?

1 Negative 1 Average 8 Good

Question Eleven. What was the feeling of the rest of the staff toward this course?

___ Negative 5 Average 5 Good

"It was felt that the course fulfilled a need within the curriculum."

Question Twelve. Was the guidance department helpful to the instructor, i.e., recruiting on the basis of interest surveys?

___ No 9 Some 1 Very helpful

The administrator who marked very helpful stated, "The use of career interest surveys have greatly improved recruiting."

Question Thirteen. As a result of this course, cooperation between teachers:

___Declined 7 Stayed at the same level 3 Improved

SECTION 4

# THE PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT IN A GENERAL EDUCATION MODE

## The Findings: Public Service Occupations Curriculum Materials in a General Education Mode

This report concerns itself mainly with a description of the procedures used and the results of field testing the Public Service Occupations Curriculum guides in New York State. The field testing took place during the 1973-74 academic year. A minimum of 2,285 students and 74 teachers were directly involved in the pilot testing of the public service program. Over 4,500 students were indirectly involved in the program. Consequently, the results of the pilot testing in a general education mode are the summarized findings from the data collected.

For purposes of familiarization with the Public Service Occupations Project and with the curriculum guides, ten persons from New York were invited to participate in a workshop conducted by the San Diego Unified School District in conjunction with the Public Service Occupations Project staff of the California State Department of Education.

At this orientation workshop, the curriculum guides were distributed, reviewed and discussed. Upon review, the personnel from New York felt that these curriculum materials might be appropriate for a number of academic areas and at various grade and age levels. Their feeling was that new courses in Public

Service Occupations would not be developed, particularly since materials from fourteen other clusters might be forthcoming. In addition, there was uncertainty about teachers and school board acceptance.

In discussing methods for implementation, it was agreed that the most feasible method would be to "infuse" these materials into the on-going curriculum. Infusion meant the selection of appropriate portions of the curriculum materials which would then be either injected into the on-going classroom activity as enrichment material or as discrete learning units of instruction, i.e., a mini-course. Selection would be made at the local school level.

Implementation was generally carried out during the February to June 1974 semester. At no time during this project were the key personnel or others relieved of their normal educational responsibilities.

Canisius High School - Private High School

The infusion approach produced creative results by allowing the staff to be involved in and to take the initiative in adapting the curriculum guides to their own particular subject matter. In the areas of history and philosophy, a comparison between the United States and Canadian governmental agencies was conducted. This was a semester course that included manpower studies, taxation programs, government agency responsibilities and functions, the role of national and local law enforcement agencies, etc.

In economics the instructor contacted a local employment agency and obtained simulation forms for interviewing prospective workers and conducted classroom role playing activities. This was a combination of cognitive and affective learning for these students.

In the 9th grade language arts classes, students did an indepth study of body language and interviewing skills. Professional interviewers scored the students on their grammar, conduct, etc.

The English Department for the 10th, 11th, and 12th grade levels felt that the Public Service "Common Core" provided a distinct challenge to them. As one instructor said, "Freedom of choice has a hollow ring if you don't teach a youngster how to go through the process of good decision making." Some units of the Common Core were used directly from the guides as total units of study. Involvement with this project resulted in educators learning more about occupations in their community, particularly public service jobs. For the first time, teachers invited representatives from the Civil Service Commission to talk to their students. This resulted in the establishment of an internship program where students now work at a governmental agency.
Alumni were surveyed as to their occupations and availability to participate in the program. Faculty members became aware of the need for advisory groups and many graduates and persons from the committee became involved in these groups for the school and for particular subjects.

Upon interviewing the staff, it was learned that there was a wide variety of non-teaching work experience held by the faculty both before and while teaching at this high school. Much occupational expertise was available internally.

The staff also became aware of the affect of some curriculum on related programs. They found students more willing to do additional research outside of class and noticed many students in deep discussion of class topics outside of class.

The staff also felt an increased awareness and respect for occupational education. There was a much better spirit of cooperation between faculty members. The result has been a major curriculum reform in a somewhat conservative institution.

Public Middle School - Oswego

At the middle school, a new mini-course dealing with the public service area was planned and offered. Within the schools core curriculum, many materials were identified and further developed from sections of the public service common core skills such as interviewing, decision making, how to apply for jobs, preparing for interviews, etc. To develop the minicourse, the staff conducted a needs assessment, developed objectives, planned program activities, and personnel and supply descriptions.

To begin, this course was offered for one hour per week for twenty weeks to 7th and 8th grade students. Teaching staff initially included the social studies and science areas, then expanded to included guidance counselors, and finally included the four core subject areas and all special subject areas.

For increased relevance, the staff began by reviewing public service agencies within the local area. Using the curriculum guides as a basis, they became aware that the largest public employers in their community were the state university, county social services areas, and the county and city government in general.

Students activities then included field trips to the state employment service, police and fire departments, social service areas, etc. Many persons from the community were invited to the school to speak to the students. School staff also drew on their own experiences to enrich the program.

The teachers found that the public service materials were highly adaptable in many areas. For example, English teachers had a new vehicle to show a practical need for many of the basic skills they teach. Reading teachers used public service kinds of materials for their various programs and Social Studies teachers used the local public service agencies as a basis for a more realistic approach to the total concept of government. The program fostered increased cooperation between subject matter areas, i.e., English and Industrial Arts.

The school staff is of the opinion that the public service guides have improved their overall curriculum and have fostered many positive relationships in this relatively small community. The staff is using the public service materials as a model for developing occupational programs in other areas as they feel that the materials are easily infused into the on-going curricula. They also are of the opinion that use of these materials has given them positive exposure to the total community, that the community is more aware of school programs and this in turn has developed community awareness and support of the career education concept in general.

As a result of field testing, the school district funded a pilot program to be offered during the summer session for middle school students who wished to take a mini-course in the area of public service. This program included English, Reading, Field Studies, etc., and offered the staff a base to further examine their own community, to plan programs and to develop ways to infuse occupational curricula materials. This course was offered to anyone of middle school age in the community.

Because of their work in public service occupations, the middle school staff was invited to participate in a statewide curriculum workshop and has been asked to participate in a number of seminars and teacher inservice workshops. They were also invited to coordinate a county-wide career education fair, and have also organized the schools initial citizens advisory committee.

Work in the public service area has led school staff into many new contacts within the community. Inroads were made with governmental agencies who are most receptive to cooperating with school programs. The school is now using the public service guides as a model for the development of curricula in other occupational clusters and the school has gained much positive public relations both within and without the school district. There is definitely an increased awareness and support for the school and its programs within the community.

The school administration, staff and community feels that the program is sound educationally and intends to continue to foster a continuing and firm effort in this direction. They feel that this is an exemplary program for this school.

Public School System K - 12 --Sweet Home

This was the first experience that the district has had with one of the career or occupational clusters. Accordingly, the district viewed these curriculum guides and their adaptation as a model which will probably influence the adaptation and design of subsequent occupational cluster material within the school system.

The common core sections of the curriculum material were reviewed by members of the English, Social Studies, Business Education and Industrial Arts departments and major portions of or concepts gained from these materials have been incorporated in most courses currently being offered at both the junior and senior high schools.

While the intent of this field testing was to determine the feasibility of using these curriculum guides at the junior high level, the district decided that this would be a K-12 project. By using the public service guides as a base, the senior high school developed a model for distributive education and public service which involved objectives, suggested activities and defining student options in various interest areas. The approach at the senior high school was one of general infusion throughout the entire school. Care was taken to explain that the responsibility for curriculum implementation rested with all staff and not on a single person or on a single department. The focus was on what career education is and what this concept offered this school system.

Career fairs were designed which revolved about the various career clusters. The public service fair was sponsored by the senior high school Social Studies department, which did so because of the availability of backup information and organizational format provided by the curriculum guides.

Two approaches were taken in the junior high school. One was to immediately begin the infusion within the junior high school of the public service material within the Reading, English and Social Studies departments, which are team-taught subjects. Emphasis was placed on skill development and was based upon the Common Core. Both students and teachers showed great receptibility to these materials. Many speakers were invited into the school and the students were taken on a great variety of field trips. In contrast to the academic program of previous years, this approach resulted in a tremendous increase in the amount of career awareness and exploration on the part of students.

A second phase within the junior high school was a mini-course which was established and based on the public service curriculum guides. This course was offered jointly by the English, Social Studies and guidance departments.

A mini-course consists of ninety minutes per day for three weeks, or forty-five minutes a day for six weeks. Students are allowed to select their mini-courses. Three times the number of students anticipated selected the public service mini-course, resulting in six sections of this course being offered.

The public service occupation cluster material was used as a basis for the development of eight more mini-courses which were offered to eighth grade students at the junior high school as a part of their English and Social Studies program. The school staff felt that their intent was to use the public service materials as a base for just "Good Education." It just happened that they used these materials for "good" career exploration and "good" career awareness kinds of learning.

It must be noted that while one teacher of the six did have some prior public service inservice training, the other five teachers did not. However, these other teachers felt that by following the curriculum guides, the inservice training needed was at most minimal or not at all. These teachers felt that they were

very comfortable with the public service curriculum guides while planning, determining objectives, content and activities.

The increased emphasis on career education at the upper levels also had an affect at the elementary school level. Career fairs were developed, although these fairs took a somewhat different approach than they did at the junior and senior high school. The fairs were based on an instructional awareness mode, rather than a focus on specific jobs or job qualifications. Teachers also began to relate occupational concepts in their on-going learning units. There now seems to be a tremendous staff awareness of career or occupational education within the district. A large number of teachers have gone to conferences and to college classes relating to this general area. Many teachers have also developed instructional units for their classes which will be used system-wide as models.

At this point it appears that the public service materials were widely accepted at all levels. The Board of Education backed up the staff recommendations and prepared a statement of goals and recommendations for career education for this school district.

The board provided an implementation package which included inservice training, curriculum development, program review and funds for materials at all levels.

Public School District, Dual High Schools -- Williamsville

Originally, one high school (South) was to be a part of this pilot testing. However, the school district decided that both high schools should participate, but as somewhat independent units. This also meant that there was one "key person," an assistant principal, at each school. This was in contrast to the other test sites where two "key persons" were directly involved. In line with school district policies, each school would develop their own plans for testing and implementation.

School staff would determine their methodology, timetables, roles and areas for involvement.

At the North High School, it was decided to initiate public service occupations curriculum work at the lowest or 9th grade level and subsequently build from this. A school-wide committee of thirteen teachers representing all academic areas was formed. In planning sessions of one hour per week, this committee decided that the career awareness phase should involve all 15 occupational clusters at the time this program was to be implemented. However, the public service curriculum guides were to be used as the base or model for planning and organizing the other 14 clusters.

The committee worked on developing a career resource center and recommended that a coordinator be provided. They obtained a financial grant from a local service organization to survey the community as to resident's occupations and availability to serve as a part of a human resources bank, met with the parent teacher association executive board to enlist their support for the program, and developed methods of arranging student classes for career education within a modular scheduling format.

The teachers were very enthusiastic about the entire program and developed many ideas on their own. In addition to infusing public service curriculum materials into the on-going subjects, they also devoted one day per month where the entire 9th grade program emphasis would be placed on one of the 15 occupational clusters.

Monthly Cluster Day

On one of these monthly occupational cluster days, twenty-five staff members from a county government agency were invited to the school and had lunch with the 600 9th grade students. A large group orientation program was held which provided an

overview to occupations in this area, and then students returned to their classrooms where government representatives met with them in small groups for further discussion and explanation. These small group presentations were followed by an evaluation "quiz" to determine their effectiveness. Both teachers and students were highly interested in this concept and liked the overall format.

Another function of the school-wide committee was to explain the overall program to each department or faculty team within the school. The department was left with the decisions on how to best develop these concepts in their area. It was also left to each department to devise ways to relate to or further build on the student experiences gained at the monthly occupational cluster day.

Students also became more involved with career interest survey, a mini-course relating to public service occupations was developed and thirty-five teachers became directly involved with various aspects of this program. The staff maintained records and offered many suggestions and ideas for improvements which could be made to this program in subsequent years. The school staff feels that this is a highly worthwhile addition to their school curricula and plans to continue to develop these concepts, now started.

High School South

The South High School had had some experience with career concepts over a two-year period as an offshoot of their distributive education program. A classroom had been converted into a career resource center and a few staff were familiar with the basic concepts of career education.

A career education resource team of seven teachers that worked out of the resource room became the nucleus of staff involved with the public service program. During the prior two years, every student in each 9th grade completed a series of career

interest inventories given in connection with their English classes.

The general method of using the public service curriculum materials in this school was through the infusion of content and ideas into subject matter areas as various teachers found use. Many "Teacher Management Activities" and "Student Learning Activities" were found appropriate and used as ideas for designing learning experiences in other cluster areas. The key to the program is "people" and the most essential ingredient is the human resources bank which the staff developed.

A ten week career exploratory program was offered each semester. During this course, students explored four possible career opportunities. The public service materials were used as a basis for the design of large portions of this program. Plans for the implementation of a shadowing program were also developed which included a student questionnaire and the development of both student and employer instructional and monitor systems. The schools human resources bank and local business association were used as a basis for developing this student shadowing program.

Five students who had special career interest used the public service curriculum guides as a text for an independent study project. A career advisory council consisting of twenty-three members of the community is now in operation. This committee meets four times per year and has offered strong support and direction to the career education concept.

Career Fair

In addition to the on-going program, the school now plans four career fairs per year or a total of sixteen career fairs over each four year period. In this way the staff feel that each student would become familiar with all 15 occupational cluster areas during their years in high school.

The public service career day was held during the spring semester. During this time the school gymnasium was used for the fair and representatives from forty-five different government agencies at the local, county, state, and federal level participated in the program. Each of these forty-five agencies was furnished with a table and display space. Each agency had one or more representatives available to explain what the function of the agency, types of careers within that agency, and literature relating to occupations. In addition, seven area colleges that offer government service programs also were represented at the fair. The organizational format for this fair was based directly on the organizational format for the public service curriculum guides. During the course of the day that the fair was being held, all sixteen hundred students within this high school had an opportunity to spend time at the fair and conduct discussions with government agencies of their interest. Follow-up data was obtained from participating professionals and from student evaluations and entered into the schools human resource bank.

Representatives from approximately twenty-five other school districts in this area attended the career fair. Their purpose was to learn how to conduct such fairs and determine ways of implementation of this kind of activity in their school districts.

After pilot testing the program, New York teachers and administrators recommended that the public service curriculum guides be made available nationally to local educational agencies for their use in implementing the public service program and as a format for them to use in planning other career cluster curricula.

Orange Unified School District

The Orange Unified School District field tested the public service curriculum project materials at Orange High School. Utilizing the "infusion method" for the public service materials, Common Core was used in the work experience program

as a basis for related instruction, which was given on a weekly basis to work experience students. Moreover, Educational Services was infused within the existing course entitled "Career Exploration in Education." This class was composed of 76 students who were interested in educational occupations. They were given classroom instruction related to education and were given the opportunity to have "hands-on" experiences at the various district's elementary, junior high and senior high schools. The students experienced all facets of the educational system.

Over one hundred students enrolled in "Law Enforcement" at Orange High School utilized the Law Enforcement Services Guide. In the class, the students received detailed instruction about the criminal justice system, police organization and operational procedures, etc., which allowed the students to have a sound foundation for enrollment in the Orange Unified School District's Regional Occupational Program class of Police Science; the city's Police Cadet Program; and/or the Rancho Santiago Community College's pre-police two-year program.

Other students at Orange High School were exposed to the Common Core through infusion in some English, Fashion Personality and Social Psychology classes.

Teachers who have utilized the public service curriculum guides have stated that the materials are "complete, thorough, and provide the teacher with a systematic approach to teaching of the public service cluster concept."

APPENDIX A

NATIONAL ADVISORY AND REVIEW COMMITTEE

Mr. Victor A. Backstrom, Instructor
Jordan High School
Long Beach, California

Mr. Alvin Beller, Director
Regional Training Center
U.S. Civil Service Commission
San Francisco, California

Dr. William Burns
Professor of Education
State University of New York
College at Buffalo
Buffalo, New York

Dr. Ronald Detrick
Director, Career Education
San Diego City Schools
San Diego, California

Dr. Clark Dobson, Associate Secretary
Association for Supervision and
Curriculum Development/NEA
Washington, D.C.

Dr. Nevin Frantz
Associate Professor of Education
University of Georgia
Athens, Georgia

Mr. Irvin Gartner, Associate Director
Berkeley Executive Seminar Center
Berkeley, California

Mr. Elmer George
Executive Director
Georgia Municipal Association
Atlanta, Georgia

Dr. Harry Huffman, Director
Business and Office Career Cluster
Colorado State University
Ft. Collins, Colorado

Mr. Alfred Koch
Curriculum Coordinator
Rawlins Public Schools
Rawlins, Wyoming

Mr. Andrew S. Korim
Public Service Specialist
American Association of Junior Colleges
Washington, D.C.

Mr. James Mayo, Director
Career Education
Fremont-Newark-ROP
Fremont, California

Mr. Fred Miller, Chief
Public Services Institute
Pennsylvania State Department of Educatio
Harrisburg, Pennsylvania

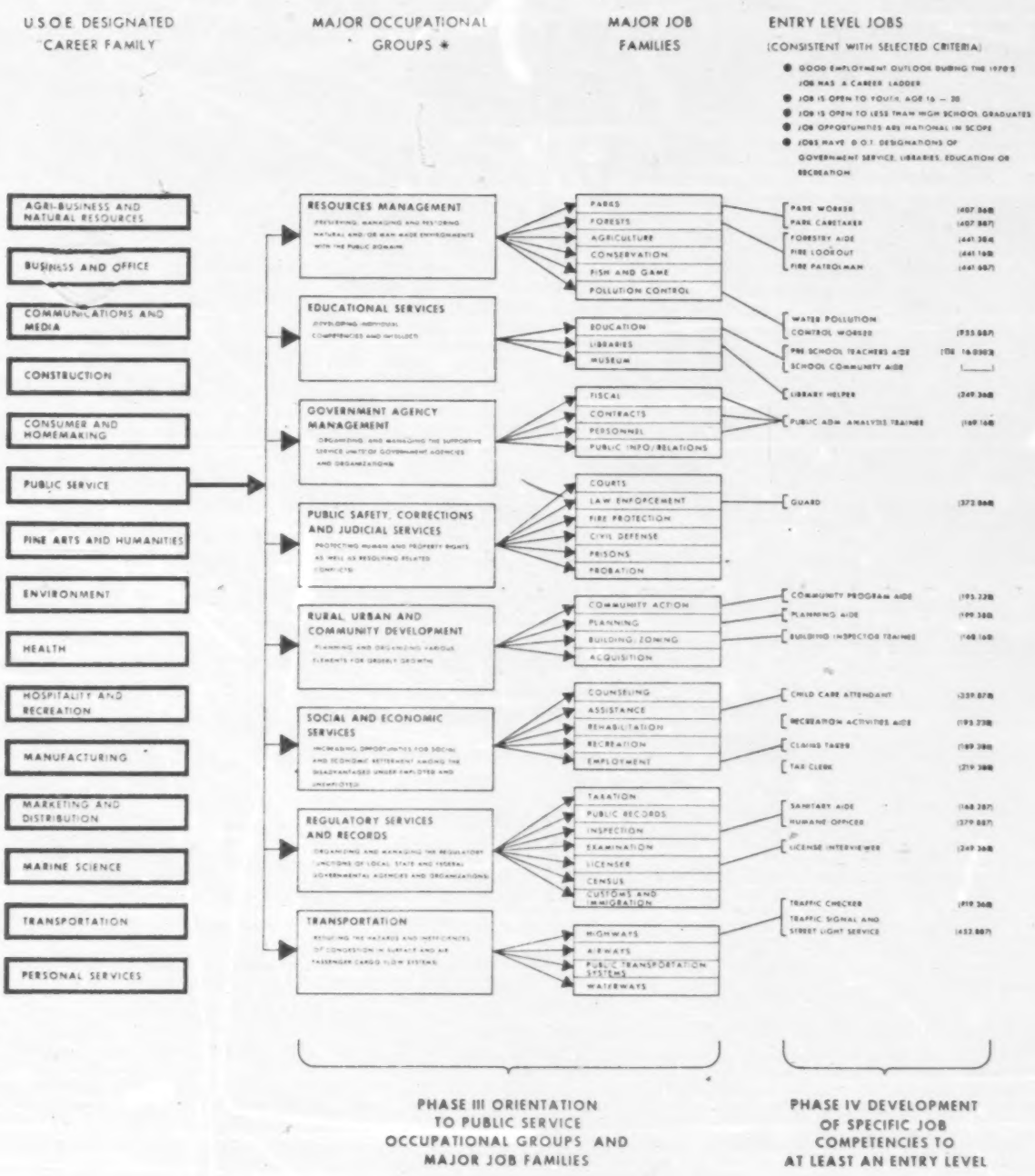
Mr. Arden Nelson
Manpower Administration
U.S. Dept. of Labor
Washington, D.C.

Dr. William Thomas, Dean
Experimental Education Programs
University of California
Los Angeles, California

Dr. James Wykle
Educational Program Specialist
U.S. Office of Education
Washington, D.C.

APPENDIX B

# MAJOR CIVILIAN OCCUPATIONAL GROUPS AND JOB FAMILIES IN PUBLIC SERVICE




* ADAPTED FROM CONCEPTS BY ANDREW S. KORN, GOVERNMENT CAREERS, AMERICAN ASSOCIATION OF JUNIOR COLLEGES, WASHINGTON D.C. 1971